

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/10548

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : C12Q 1/68; G01N 33/574.

US CL : 435/6, 7.23

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6, 7.23

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DIALOG, APS

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,506,106 A (CROCE et al.) 09 April 1996, col. 1, lines 50-65.	1-5
X	DEGUCHI, T. et al. Detection of Micrometastatic Prostate Cancer Cells in the Bone Marrow of Patients with Prostate Cancer. British Journal of Cancer. 1997, Vol. 75, No. 5, pages 634-638, especially page 634.	1-5
P,Y	AN, G. et al. Cloning of Prostate-Specific Genes that are Suppressed in Metastatic Prostate Cancer by a PCR Southern Differential Hybridization Method. Cell and Tumor Biology. March 1998, Vol. 39, page 208, especially page 208.	1-6

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	*T*	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
*A* document defining the general state of the art which is not considered to be of particular relevance	*X*	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
*E* earlier document published on or after the international filing date	*Y*	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
*L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	*&*	document member of the same patent family
*O* document referring to an oral disclosure, use, exhibition or other means		
*P* document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search

12 AUGUST 1999

Date of mailing of the international search report

09 SEP 1999

Name and mailing address of the ISA, US  
Commissioner of Patents and Trademarks  
Box PCTAuthorized officer  
YVONNE EYLER

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ÉTATS-UNIS D'AMÉRIQUE

Date of mailing (day/month/year) 03 February 2000 (03.02.00)	in its capacity as elected Office
International application No. PCT/US99/10548	Applicant's or agent's file reference DEX-0034
International filing date (day/month/year) 12 May 1999 (12.05.99)	Priority date (day/month/year) 21 May 1998 (21.05.98)
<b>Applicant</b> ALI, Shujath et al	

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

15 December 1999 (15.12.99)

in a notice effecting later election filed with the International Bureau on:

\_\_\_\_\_

2. The election  was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Juan Cruz Telephone No.: (41-22) 338.83.38
Facsimile No.: (41-22) 740.14.35	

**COPY**

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US99/10548

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : C12Q 1/68; G01N 33/574  
US CL : 435/6, 7.23

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/6, 7.23

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DIALOG, APS

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,506,106 A (CROCE et al.) 09 April 1996, col. 1, lines 50-65.	1-5
X	DEGUCHI, T. et al. Detection of Micrometastatic Prostate Cancer Cells in the Bone Marrow of Patients with Prostate Cancer. British Journal of Cancer. 1997, Vol. 75, No. 5, pages 634-638, especially page 634.	1-5
P,Y	AN, G. et al. Cloning of Prostate-Specific Genes that are Suppressed in Metastatic Prostate Cancer by a PCR Southern Differential Hybridization Method. Cell and Tumor Biology. March 1998, Vol. 39, page 208, especially page 208.	1-6

Further documents are listed in the continuation of Box C.  See patent family annex.

Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier document published on or after the international filing date
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

Date of the actual completion of the international search

12 AUGUST 1999

Date of mailing of the international search report

09 SEP 1999

Name and mailing address of the ISA/US  
Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Authorized officer

*D. Lawrence Fer*  
YVONNE EYLER

Facsimile No. (703) 305-3230

Telephone No. (703) 308-0196

X  
PATENT COOPERATION TREATY

PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference DEX-0034	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/10548	International filing date (day/month/year) 12 MAY 1999	Priority date (day/month/year) 21 MAY 1998
International Patent Classification (IPC) or national classification and IPC IPC(7): C12Q 1/68; G01N 33/574 and US Cl.: 435/6, 7.23		MAR 13 2001
Applicant DIADEXUS LLC	RECEIVED TECH CENTER 1600/2900	

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 3 sheets.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 0 sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 15 DECEMBER 1999	Date of completion of this report 03 DECEMBER 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer MINH-TAM DAVIS Telephone No. (703) 308-0196

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/10548

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

 the international application as originally filed the description:pages 1-17, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_ the claims:pages 18-19, as originally filed  
pages NONE, as amended (together with any statement) under Article 19  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_ the drawings:pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_ the sequence listing part of the description:pages 1-8, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

the language of publication of the international application (under Rule 48.3(b)).

the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in printed form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4.  The amendments have resulted in the cancellation of: the description, pages NONE the claims, Nos. NONE the drawings, sheets/fig NONE5.  This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\*Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/10548

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. statement

Novelty (N)

Claims 6 YES  
Claims 1-5 NO

Inventive Step (IS)

Claims 6 YES  
Claims 1-5 NO

Industrial Applicability (IA)

Claims 1-6 YES  
Claims NONE NO

## 2. citations and explanations (Rule 70.7)

Claims 1-5 lack novelty under PCT Article 33(2) as being anticipated by US 5,506,106 or Deguchi et al.

US 5,506,106 or Deguchi et al teach measuring the expression of a prostate specific gene for detecting metastatic prostate cancer.

Claim 6 meets the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method for diagnosis of prostate cancer by measuring the levels of SEQ ID NO:1.

----- NEW CITATIONS -----

NONE